
Securing India's Rise: A Persuasive Case for an Indian National Security Makeover

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“Yadi Shaastra (civilisational wisdom) ko bhuloge, toh apni Sanskriti kho doge, Par agar Shastra (instrument of force) ka tyaag karoge, toh Rashtra hi kho doge”

—Acharya Chanakya, on the Saliency of the Instrument of Force in a Nation's Strategic Calculus

Abstract

An aspirational, resurgent, India, today, in many ways, is the geopolitical toast of the world. In numerous metrics, it does seem to be well on its way to becoming a 'Viksit Bharat' in the time frame of 2047-2050. If there is one eventuality, however, that could disfigure India's rise as a 'developed nation by 2047, it is a major national security reversal. In the eight years, the Government has laid a strong foundation for India's National Security Makeover. Given the accumulating strategic adversity around its peripheries, however, multiple transitions still need to be made. The article examines the challenges and opportunities that line India's National Security Path as also the transformation that we need to guardrail India's rise. In doing so, the article also discusses

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the steps that the Indian Military and wider Defence need to take to transit from a framework focused narrowly on India's Defence to one that can also enable its Rise.

Backdrop

In many metrics of geopolitics, on several accounts, India does seem to be extremely well poised. As much a leader of the Global South, as of the G-20, it is indeed the geo-political toast of the world. If the objective is to make India a developed nation by 2047, Indian State must resolve to galvanise the economy further, empower the underprivileged, minimise social inequities, embrace emerging technologies, energise the private sector, business and commerce, give a fillip to the metrics of innovation, energy and enterprise as also enhance its regional and global competitiveness, so as to realise the vision of a 'Viksit Bharat' (India's emergence as a developed nation). Were we to be even more ambitious, we could also become a 'Vishwaguru' of a unique kind—propelled by the attributes of 'economic primacy', 'technological lead', as also 'a net exporter of ideas and best practices'.

Such an aspirational surge/optimism is not without basis. For a couple of reasons. Recently, Stanford economist and Nobel laureate Michael Spence, declared that, **"India is the most outstanding (economic) performer now. It remains the most preferred investment decision"**.¹ Chetan Ahya, Morgan Stanley's Chief Asia Economist, has predicted that the Indian economy will account for one-fifth of global growth over the next decade.² Our physical infra has improved greatly; our digital infra, courtesy instruments like the Unified Payments Interface (UPI), is now better than even the USA. When we so desire and resolve, we do pull off miracles. Developing the COVID vaccine in less than a year as also our great success in insulating Indian cities and the populace from the scourge of terror over the last eight years, are extremely creditable feat indeed. It is also worth recalling that

from the year 1 to 1820 in history, the two leading economies of the world and in many ways the two foremost civilisations, were China and India. So, a 200-year-old aberration could well be brought to an early end. It will be unwise, however, to presume a certain inevitability in this regard.

It would also be innocent to believe, that such an aspirational path will not be lined with many dangers and numerous pitfalls. In fact, if there is one eventuality that could disfigure India's rise as a developed nation by 2047, it is a major national security reversal.

Sagacity would demand that we cast a long gaze over the challenges and opportunities that line India's National Security Path, and identify the guardrails that we need to secure India's rise.

There is a new realisation to create a strong foundation for India's National Security Makeover. The creation of the Chief of Defence Staff (CDS)/Department of Military Affairs (DMA), the new normal in our strategic outlook (as demonstrated by Balakote and Kailash), the meaningful steps taken to move 'Defence' out of the shadows of 'Foreign Policy' as also the very forward-looking reforms in capacity building—symbolised by 'Aatmanirbharta in Defence,' are game-changing initiatives indeed. While a great deal has been achieved, given the scale and complexity of the National Security Challenge, there are multiple transitions, still to be made. This article seeks to outline the possible contours of such a makeover; of making India so strong, so as to firmly deter any force that seeks to threaten our peace and prosperity. True power, it must be remembered, speaks softly. 'It has no reason to shout'.

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Strategic Context

In evaluating the evolving strategic context, it may be useful to take note of the accumulating strategic adversity that is engulfing the Indian State: a strategic-military challenge, that is unfolding in terms of a giant pincer with three arms.

The **first arm of the pincer**, as demonstrated by recent events in Galwan and Yangtse/Tawang, lies obviously to the North and the East—along the Line of Actual Central (LAC), and beyond in the Western Theatre Command—where the coming together of China’s geopolitical ambition, its economic zoom and military gallop to put it succinctly, is rather breathtaking. The brazen aggression in consequence and loss of influence in our immediate periphery are just two of the side effects. We have of course in response re-balanced majorly, we have signalled that there will be costs to pay for adventurism of any sort, we have narrowed China’s response options, we are growing our technological prowess, we are doing what we must in terms of infrastructural development and our wider combat posture—but the challenge remains—the lag with China is growing in some ways.

Developments along our Western horizons, constitute the second arm of the pincer. The instabilities arising out of Afghanistan, with every possibility of a mega terror challenge coalescing again (the Tehrik-e-Taliban Afghanistan (TTA), Tehrik-e-Taliban Pakistan (TTP), Tehrik-e-Labbaik Pakistan (TLP), Lashkar-e-Taiba (LeT), Jaish-e-Mohammed (JeM), remnants of Al Qaeda and the Islamic State of Iraq and Syria (ISIS) coming together); Islamist triumphalism—we have disposed of both the Soviet Union and the USA—could drive Taliban’s activities and ambitions in the future; the grim prospect of narco terror; the changing balance of power—America’s significant pivot to the Indo-Pacific has led to the abandonment of critical geo-strategic space which is being filled by new alignments, viz, China—Pakistan—Turkey—Iran—Taliban; the rising spectre of Pan Turkism with Turkey determined to rewrite the

geopolitics of Eurasia. Chinese forays into Eurasia are significant: we too need to enhance our involvement with the European Union (EU) and North Atlantic Treaty Organisation (NATO)—a dedicated military office in the Indian mission to Brussels where both EU and NATO are located, maybe a good way to begin. Closer home, Pakistan's inability to climb out of its civil-military trap, its continued macro-economic instability as also its intimate military alliance with China are major causes of worry; the relentless influx of drones across the Punjab/Jammu and Kashmir (J&K) border—has wider strategic ramifications. All kinds of issues are disconcerting and need to be watched very carefully.

If this were not enough, we see a growing Chinese presence in the Indian Ocean Region (IOR): the veritable, third arm of the pincer. The People's Liberation Army Navy (PLAN), is already our maritime neighbour in the IOR, with a robust Eastern Maritime Flank (Hainan, Ream in Cambodia, Kyauk Phyu in Myanmar, bases in Thailand and Sri Lanka), an enlarging Western Maritime Flank (Gwadar, Djibouti, Abu Dhabi, as also bases in Namibia, Seychelles, Tanzania, even the Equatorial Guinea in the Atlantic), as also a staying power, which is becoming menacing with every passing day.

So, the Adversary Grand Strategy seems to be quite obvious: fix India to its terrestrial threats and concerns along the land borders in the North and the West and delay/enfeeble its long overdue turn to the seas; continue to capsule India's strategic thought and frame into a protective shell, shorn of a viable military reach beyond its borders. Now, unless there is a major re-imagination in our 'strategic outlook'—quickly and decisively and we act in multiple ways, the weight of the three pincers could envelop us in a kind of debilitating, strategic squeeze.

Pathways/Transitions

Given the realities of the strategic context, what are the pathways we must embrace, the transitions that we must make, to strengthen our

national security poise? What is the rejig we need in terms of our long-term strategic outlook? What more should we do in terms of diplomatic overtures, sharper external balancing, increasing the heft of our military diplomacy, growing our military capacities and adding techno-military muscle to our strategic partnerships? Why and how, must we shift our military gaze outwards so that the swathe of Indian power projects far enough to meet threats sufficiently afar, than our defensive crouch currently allows? What is the Indian Military's Data Strategy? What is the positive leveraging with regard to our considerable data exhaust? What are our overarching strategies with regard to emerging technologies: Artificial Intelligence (AI), robotics, quantum, advanced materials, Virtual Reality (VR)/Augmented Reality (AR), bio-tech, et al.?

How could we, through some creative statecraft, recalibrate our maritime geopolitics with our continental strategy? In what manner should our strategic policy course be correct?

- What are those pathways of hard and soft power that could usefully constrict and constraint China?
- How do we create such a strategic-military balance that China is not even tempted to alter the status quo?
- How could or how must, the Indian military and wider defence, become more dynamic?
- What should we do to re-structure the Indian military from one that is resolutely focused on India's defence to one that could also enable its rise?
- A discussion on the possible pathways/transitions that follow, may be useful.

Re-Imagination: Strategic Outlook. First and foremost, we need a major re-imagination of our beliefs and strategic outlook. Even as we do everything to fortify our posture along the Line of Control (LC)/LAC, with Pakistan/China we must concurrently take our ambitions far beyond.

The latter cannot wait for sequential addressal. Within the traditional domains we need to invest far more in the maritime domain specifically and in multi-domain proficiencies more generally, than we currently do. We need to engage and create capacities far more aggressively in the emerging domains: space, cyber, Electronic Warfare (EW), AI, quantum, robotics, et al., as also make some big moves in terms of creating capacities in digital combat. Only then will we be able to lay the edifice for multi-domain, integrated deterrence, so central to the operational prowess of modern militaries. The speed and momentum of change in National Security issues of this kind are hesitant and slow on two accounts. One, is because there is a view in some quarters, that capacities in emerging domains like Space, EW and AI are exotic, airy and do not have great relevance to real-world combat. Nothing could be further from the truth. All these emerging domains have significant, if not game-changing military payoffs as also intimate tactical impact; they are already affecting and will continue to change the course of company/squadron battles of the future. They will also impact our larger military poise in the Western, Northern and Eastern Theatres and must therefore be embraced with vigour. Without a Low Earth Orbit (LEO) configuration of satellites, for example, surveillance in tactically acceptable revisit times will not be available to local commanders. Without Position, Navigation, Timing (PNT) accuracies provided by satellite configurations, precision targeting will not be possible. Two, because of our strong obsession with turf and our entrapment in stand-alone silos of service tribalism. Unless we show the requisite wisdom and statesmanship to collapse these silos purposefully, we shall continue to lag in the strategic–military competition with our adversaries. We also need to move towards building power projection capacities in a phased manner—not to jackboot around the world, but to be able to militarily influence events at progressively increasing distances from the mainland, whence Indian interest so demands. The Indian State, it needs to be emphasised, is not expansionist; territorially

we are a status quo power. Such an outlook, however, is very distinct from building niche capacities to project power outwards, incrementally. A well-thought-through, informed, decision in this regard needs to be taken soon and resourced in terms of doctrinal orientation, technologies, combat platforms and inventories.

The China Challenge. China, of course, is the obvious seminal challenge before Indian statecraft. We need, however, to comprehend and internalise, its true import, urgency and gravity. For the first time in history, the world's two leading economies—China and India (Number 1 and Number 3 in PPP terms) are growing in close proximity without a physical barrier (the formidable Himalayas) or even a geographic buffer (Tibet). Our geostrategic trajectories are bound to clash— unless we take some smart, resolute, steps to ensure that such an intersection is peaceful. The prospects for such peace and prosperity were perhaps high as long as China was 'hiding and biding' and 'rising peacefully'. As it turns out, the peaceful rise was an elaborate ruse, a monumental exercise in orchestrated deception—China used the narrative and the time so gained, to stage an economic miracle, steal technologies and build/create robust capacities in defence and warfighting. Resultantly, China today is this economic behemoth, whose GDP exceeds that of Japan, Korea and India put together. By 2035, it is said, that while China will account for 24 per cent of global GDP, the USA will account for a mere 14 per cent.³ The PLA has grown 44-fold (not merely in terms of bean count but in aggregate military capacities) over the last four decades. Its growth and evolution has been a personal project steered for a large part by Chairman Xi himself—some say, China's military modernisation is the most massive in the history of mankind. Xi's view of economic might and military power, which we may like to note is equally unique, "As important as economic prosperity is, it is military power that ultimately lies at the heart of state power". Now that China thinks or knows that it has arrived, it has abandoned 'hide and bide', and has consciously gone 'loud and proud'.⁴

Some Chinese ideologues are of the view, that the nation has mustered enough wealth; it is time now to turn that considerable wealth into power. An aphorism doing the rounds in Beijing, goes something like this, ‘Mao gave us the revolution, Deng gave us wealth, Xi will restore China to its greatness’. If former Australian Prime Minister, Kevin Rudd is to be believed, Xi’s China is marching to the tune of ‘Left, Left, Right’.⁵ Left on economic policy, left on ideology and right on nationalism—an ominous trio. The BRI—this ambitious, integrated enterprise of power and influence, undergirded by trade, commerce, a massive infrastructural push, diplomatic and military capacities, thus far, has been somewhat of a mixed bag. If it does live up to its conceived potential, however, it could create a Sino-Centric global order of considerable global influence. With ASEAN, alone, while American trade has grown three times (135 to 362 billion dollars) in the period 2000-2020, China’s trade has grown 17 times (40 to 685 billion dollars) in the same period.⁶ As the focal point of Cold War 2.0 shifts to Asia/the Indo-Pacific Theatre, increasingly, American hegemony seems to be making way for Chinese hegemony. The challenges before India, therefore, are indeed grim and stark. There is of course a possibility that Xi’s abject mishandling of COVID could lead to further protests and sour the Chinese dream. Maybe, the famed Chinese economy has already peaked. China’s authoritarianism at home, aggression abroad and inept governance may have taken much of the sheen off the ‘Chinese model.’ Yet, it would be unwise to ignore the scale, and potency of the China challenge. The need of the hour is ‘a more than government approach’—not only all the arms of government but the larger nation will have to come together in a comprehensive manner to counter the China challenge. We must sharpen our competitive skills in strategising, ideation, technology, R&D, industry, business and defence—for China is indeed a ‘tough cookie’. While speculating on Chinese intent makes for some good debates, it will be far wiser, to watch very carefully, China’s military capacities on the ground. It appears to the author of this

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article that Chinese military capacities in the Western Theatre Command are just as formidable as they are in the Southern and Eastern Theatre Commands. China is indeed preparing for war. Viewing intent through the adversary lens may also be useful. In this regard, this view of Gary Klintworth, an Australian commentator on strategic affairs could be prescient, “China perceives India to be ambitious, overconfident, yet

military powerful neighbour, with whom it may eventually have to have a day of reckoning. Yet, China consistently denies that New Delhi is a potential rival, driven by the shrewd calculation that acknowledging India as an adversary would elevate its importance undeservedly and thereby undermine China’s efforts to position itself as the preeminent power in Asia in Asia”.⁷ In its quest to restore greatness, Xi’s China could well gamble and cast an evil eye on India. We must create such smart and potent levers of deterrence, strategic–military balance and national power that China is not incentivised to alter the status quo. The right question to ask in the future should not be as to why ‘China did this or that’, but why did our deterrence fail? We must do all that we must now, to ensure that our deterrence is fail safe. That would be a higher metric to live by.

Asymmetric Balancing. While enhanced budgets help to grow combat capacities, monies alone, do not create cutting-edge militaries. Asymmetric Balancing of a stronger, better-resourced military, is well nigh possible through smart moves and wide-angled, comprehensive reform. We need to introspect and take some significant decisions in this regard. Why is it for example, that within similar budgetary differentials in defence, Beijing is causing far greater displacement anxiety in Pentagon, than we cause to Beijing? Were we to carry out many of the reforms in defence, which are currently in various stages of gridlock, with greater

speed and vigour, we would radiate far higher levels of deterrence, than we currently do. So, theaterisation, cross-pollination in the Ministry of Defence (MoD), creation of new talent pipelines, a more vigorous embrace of emerging technologies, placing of orders on start-ups and the private sector [as against mere grant of Acceptance of Necessity (AONs)/ Acceptance In Principle (AIPs)], must happen in accelerated time frames. Gatishakti (speed and scale) in defence reforms, is indeed the need of the hour. The proposed Theatre Commands, for example, must not merely be structural entities but digitised as well. Unless, the tangible benefits of AI and proficiencies in Edge Computing flow to the field, we will not be able to make the long-overdue transition to digital combat. Appointing a well-known, civilian, IT professional as Chief Data Officer in the MoD will also be very useful. The future lies in hybrid naval and air fleets of manned and unmanned systems—we need to re-structure accordingly. The current powers of the DGBR are of the order of Rs 150 crore per project which translates to a mere 15 km of road length. Why can we not delegate enhanced powers so as to enable the execution of greater road lengths at faster speeds to meet the obtaining infra challenge along the LAC? If the delegated powers of Director General Border Roads (DGBR) are enhanced to Rs 1000 crore, he will be able to deliver 100 km of road length in 2 years. Without such delegation, even if DGBR is allocated Rs 1000 crore, he shall be able to deliver 100 km of road length, but in 6 years (four additional years due to the to and fro of the process). So, even within current budgetary allocations for defence, if we undertake associated defence reforms, as discussed, we could deter China sufficiently. With additional budgets, we could of course take the fight more aggressively, to China.

Civil-Military Fusion. For far too long, India has grown up in these civil-military silos. Strategic advantage/productivity in the modern world, however, lies at the cusp of civil-military fusion. National Security today, is far too complex and sophisticated, for any single institution to

be able to grapple with its myriad challenges successfully. In the modern national security enterprise, all talents, attributes and capacities—civil or military, need to converge and come together. In India, the beginnings have been made. We need, however, to impart far greater speed and momentum to the enterprise of Civil-Military Fusion. Soldiers, civil servants, entrepreneurs, academia, the private sector, start-ups, dreamers, technologists and the scientific community all need to come together in the solemn enterprise of national security. National Security in India today, is in fact at a critical crossroad. It needs to transit from ‘mediocrity’ to ‘talent’ and from ‘status quoism’ to ‘transformative change.’ Civil-Military Fusion is just the right tool to propel the transition. A cross-pollinated MoD, civil talent recruited at industry-grade emoluments in the Defence Space Agency and the Defence Cyber Agency as also civilian faculty in military institutions of professional learning, maybe a good way to begin.

The Spirit of Innovation, and the Scourge of Bureaucratise, Process & Procedure. ‘Aatmanirbharta in Defence’ and a host of parallel initiatives have unleashed the animal spirits of innovation, energy and enterprise through the defence eco-system in India. IDEX, thus far, has been a stellar success. Such spirits, however, are held back and are hostage to the scourge of process, procedure and bureaucratise. The sub-optimal utilisation of DRDO’s Technology Development Fund (TDF) symbolises the malaise. General Financial Rules (GFR) and the Defence Procurement Procedure (DPP)-2020 are documents that allow a lot of discretion, as also provide considerable space for positive, affirmatory action. Alas, the officialdom that works the system, is extremely conservative and cautious in interpreting the existing rule framework for positive outcomes. In consequence, ‘Aatmanirbharta in Defence’ has not quite realised its true potential. In fact, in the author’s view, the political class today, is far more ambitious, risk-taking and far-sighted than the leadership in civil, technological, financial, administrative and military bureaucracies. A great

deal of introspection is called for. We need to do far more to galvanise initiatives already underway. There is also a strong case for financial transformation: the 'software bugs' in the domain of financial advice/enablement are far too many, for Indian Defence to become competitive internationally. The default setting in the processing of files/cases is still to see 'ghosts' rather than interpreting rules and regulations creatively and imaginatively to realise desired outcomes. There are few incentives in the financial system for initiative and risk-taking whereas modern military capacities especially those in techno-military innovation lie in risk-taking. The Competent Financial Authorities (CFAs) too, have failed to provide the necessary leadership whereby 'outcomes' trump 'processes.' We need to make urgent corrections, else, we shall miss a golden opportunity to take Indian defence to the next level in productivity, deliverance and preparedness.

The Tandem March of Defence & Diplomacy. Noted American diplomat, George Schultz, famously observed that 'negotiations are but a euphemism for capitulation unless the shadow of power is cast across the bargaining table'.⁸ Wisely, therefore, the current government has shone the political torchlight for the defence to emerge out of the shadows of foreign policy. The creation of the CDS/DMA itself is a resolute step in this direction. It has restored the legitimate voice of the military in the larger strategic policy-making while calling upon the military and the CDS to conceptualise policy as also drive change through the National Security System. This also provides an opportunity for Defence to acquire an independent character in tandem with Foreign Policy. A good way to begin is perhaps by cross-populating the MoD/MEA with Indian Foreign Service (IFS)/Defence Services Officers at the Apex Level (Joint, Additional and Special Secretaries) to drive initiatives in various domains: in pushing defence exports and in helping Indian defence companies navigate the complexity of external markets. We also need to re-think our relationships and re-visit the metrics of

our strategic autonomy. Strategic dependence on Russia for equipment, logistics and spares of the order of 60-80 per cent, especially, when much of that equipment is not sophisticated, innovative enough for the modern battlefield is a cause of some concern. Apart from the need to diversify our military inventories, we will also have to consider the choices for Indian geopolitics as the Sino-Russian embrace deepens. With regard to our partnership with the USA, we should neither expect, nor do we need either American blood or American treasure. What we need however, is access to American technology to counter the Chinese techno-military juggernaut. Existing frameworks like the 2+2, the QUAD and the Defence Technology and Trade Initiative (DTTI) need to be energised to enable us to tap into American technological prowess and upgrade our own poise in critical and emerging technologies. Technological capacity so bestowed will help to greatly strengthen the Indian Military posture without raising temperatures, while yet causing great worry amidst Chinese strategic elites. It also needs to be emphasised that the defence eco-system, optimally leveraged can deliver not only international influence but also revenues. Look at Turkey—a middle power—yet one that has emerged as a ‘drone superpower’; it is now using its new found position to take out threats at source, grow its strategic heft as also generate considerable revenue. The Turkish state along with the Bayraktar conglomerate is a dominant player in the drone market. MoD/MEA in concert, may consider mentoring two/three Defence Start-Ups/Private Defence Companies to deliver cutting-edge military capacities (and therefore influence) in a similar manner. Future Indian Military Theatre Commanders will also need to develop a quasi-diplomatic visage—the Western Theatre Commander, for example, should be looking not only at Pakistan but also at Afghanistan, Iran and Turkey through a military-diplomatic lens. Civilian foreign policy/technology advisors should be embedded in Theatre Commands to drive initiatives in this regard.

Roadmap

The afore-stated pathways/transitions could provide the conceptual frame for transformation. A more precise 'roadmap', that flows from the pathways discussed earlier, is discussed in succeeding paragraphs.

A Transformed Instrument of Force. An Indian Instrument of Force, that is joint, optimised, calibrated,

technologically enabled and ready will be the surest guarantor for peace and stability, along the LC, LAC and in the Indo-Pacific. Each attribute is a one-word descriptor, albeit, a gigantic challenge that any military mind knows, will take decades of resolute capacity building to create. The Indian Military we all know, has been struggling with 'jointness' for well over three decades and is yet to attain any finality in its endeavour. Similarly, with 'readiness': in the build-up to the Ukraine Conflict, the Russian military was described by many analysts as this 21st Century Force, adept in IW, brilliant at leveraging the Gerasimov Doctrine, a master in 'winning without fighting.' When called upon to fight in Ukraine, however, it proved to be surprisingly 'Unready' and unravelled dramatically in consequence. The enormity of the challenge, for the Indian Military, the distance to be travelled to operationalise these attributes should be obvious.

Wide Spectrum Preparedness. The abiding lesson from the Ukraine conflict for militaries worldwide is to focus on wide-spectrum preparedness, arduous slogs in battle and long-haul industrial and logistics sustainment. Comprehensive techno-strategic competitiveness, grey zone proficiencies, competencies in traditional warfighting, industrial era prowess, digital combat and nuclear capacities are all equally salient. It is not a question of either/or—prioritisation does not seem to be an

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option any longer; full-fledged embrace of all six domains is a strategic imperative. India needs to attune its statecraft accordingly.

Multi-Domain Integrated Deterrence. Another challenge for Indian statecraft is to create a robust framework of integrated deterrence, by converging capacities in multiple domains—diplomacy, strategic partnerships and warfighting. The skill with which we integrate capacities in the emerging domains (space, cyber, EW, etc.) with proficiencies in the traditional domains will define Indian deterrence of the future. We need to draw up a ‘deterrence matrix,’ composed of kinetic and non-kinetic instruments, sub-threshold and conventional capacities, an eco-system of long-range precision, diplomacy as also technological upgrades through strategic partnerships to enhance our deterrence signatures; and work resolutely thereafter to take the initiatives to their logical conclusion.

Techno-Strategic Competitiveness. The Indian military is a combat-hardened institution. It has a long tradition of valour and combat delivery. It needs to however buttress the same with technological sheen—significant steps have already been taken—they need to be buttressed further. Let us explore one metric, AI, which is slated to transform not only the way we think and live, but also how we fight. The Indian Military needs to first and foremost get its integrated data centres and pipelines going, in order that data resident in the three services is mobilised for combat effectiveness. We will, thereafter, need exquisite talent pipelines (civilian expertise drafted into the military for specific projects) to work on stacks like ‘compute’, ‘data,’ ‘algorithms’ and ‘engineering.’ Such initiatives will translate into game-changing military payoffs/differentials in the sensors grid, the fires grid, the command and control grid and the logistics grid. An, AI-Enabled Northern/Eastern Military Theatre will lead in the Observe, Orient, Decide and Act (OODA) loop vis-à-vis the PLA’s Western Theatre Command (WTC), thus enhancing our combat effectiveness by an order of magnitude. Likewise, proficiencies in quantum will translate directly into military deliverables in stealth, high

bandwidth data exchange, target detection and identification, military codebreaking, computing, et al. The seminal role of chips and micro-electronics as demonstrated in the Ukraine conflict should drive us to significantly upgrade our prowess in the domain of chips and micro-electronics. It turns out that the formidable Russian military machine has come a relative cropper on account of a severe deficit in indigenous chips and allied micro-electronics. As many as 27 Russian military systems (from tactical radios to kill chains to high-end missiles) and 450 micro components used by the Russian military in the Ukraine conflict have been subjected to Western sanctions;⁹ the resultant squeeze has led to declining levels of Russian combat effectiveness on the battlefield. The utility of sanctions, therefore, has been demonstrated beyond being a mere preventative tool—sanctions have emerged as a strategic asset in the toolkit of nations to neutralise adversary combat prowess. The lesson for the future is more than apparent—self-sufficiency in micro-electronics will undergird the strategic autonomy of nations. We in India, need, therefore, to work with renewed diligence and vigour to indigenise our capacities in micro-electronics and chips—and here, we have a long road to travel. So, we must do all that we can to grow our strategic-military poise through the embrace of emerging, disruptive, technologies: it is abundantly clear now that he who dominates the commanding heights of technology will be the strategic lead in the global pecking order. A lot of work needs to be done: from chips to space to AI to military autonomy—there are a plethora of technologies that need to be developed and converged. We need to pursue each of these techno-military projects with vision and passion to enhance our strategic-military competitiveness.

Grey Zone Proficiencies. Grey zone challenges which are currently manifest along the LAC, will also intensify in the air and maritime domains. Violations of airspace, establishment of arbitrary Air Defence Identification Zones (ADIZs), buzzing of Indian ships by PLA aircraft,

maritime coercion, etc, will manifest along our aerospace frontiers and in the IOR. We need to brace up. Do we need to upgrade our Coast Guard from merely an instrument of coastal security to a formidable entity of maritime coercion? We must also be wary of a PLA Deception Strategy that makes us believe that it is only the grey zone that matters, lull us into complacency and strike where we may be relatively unprepared—in all-out conflict.

Traditional Warfighting. The overriding lesson from Ukraine is that good old, traditional, warfighting is as salient as ever. Company/squadron battles, infantry slogs, the fundamentals of fire and manoeuvre, the blood and gore of combat are well and truly alive. In Ukraine, many paradigms regarding the ‘character of war’ have also been upended and some myths shattered, most notable amongst them being that all-out war is a thing of the past and that modern conflicts will be sharp and swift. Even as the Indian military pursues technological sophistry to include digitisation, it must not be at the cost of neglecting the fundamental tenets of combat—that is the central lesson from Ukraine. We will need to review our industrial capacities (manufacturing and surge) and military inventories for prolonged conflict, in terms of equipment, munitions and spares. We will need to upgrade existing combat platforms in terms of digital capacities: microelectronics, loiter, active protection systems, situational awareness, star link type terminals, jammers, creation of data pipelines, instruments to leverage big data, robotics and military autonomy as also by tapping into the significant advantages of combat simulation. Priority to digital capacities over legacy platforms must get reflected in our defence budgets of the future. We need to seriously revisit our industrial-era capacities/long-haul logistic sustainment. When Ukrainian stocks of artillery ammunition fell low after the first two months of intense warfighting, not a single NATO nation had the capacity to refill those stocks. Even the mighty USA is struggling to roll out High Mobility Artillery Rocket Systems (HIMARs) and Javelins in

sufficient numbers. That should drive home the gravity of the challenge of logistics sustainment and spur us into suitable action.

The Aerospace/Maritime Domains. The underwhelming performance of Russian airpower, despite overwhelming superiority in numbers across aircraft types, the absence of Suppression of Enemy Air Defence (SEAD) and Destruction of Enemy Air Defence (DEAD) and the broader inability of the Russian Air Force to establish air superiority, merits deeper investigation and analysis, especially since our own IAF operates a largely Russian origin fleet predicated on similar operational concepts. The Ukraine conflict has emphasised yet again that the battlespace has shifted quite dramatically from the 'close kinetic' to 'beyond visual range (BVR)'. It has also underlined the fact that the great democratisation of capacities in space, air and intelligence are severely challenging the ability of conventional air forces to operate with relative freedom, let alone dominant impunity as was the case in some of the campaigns of the recent past. The significant contribution of unmanned systems like the Bayraktar and Switchblades drones in impacting combat outcomes also needs to be acknowledged. In recognition of the role of Drones and Unmanned Combat Aerial Vehicles (UCAVs), the United States Indo-Pacific Command (US INDO-PACOM) is in the process of re-organising/re-structuring and embracing hybrid sea fleets (manned and unmanned). The US Air Force is taking similar steps to arrive at a hybrid force structure—a mixed array of manned and unmanned systems. We may consider revisiting the aerospace domain in the stated context and find solutions rooted in the dynamics of the Indian operational framework. Yet another factor that needs to be reflected upon is the inability of the Russian Air Force to carry out effective and sustained targeting from medium altitudes, due to the efficacy of ground-based, mobile AD systems. The inability of rotary wing platforms to penetrate enemy airspace due to interference by man-pads also demands a realistic assessment. In the maritime domain, we may like to consider creating a

robust Anti Access Area Denial (A2AD) network (radars and missiles) in the IOR that constrains/challenges the freedom of operation of the PLAN.

Long Range Precision. The game-changing role of precision strike regimes/long-range fires in the Ukraine conflict also merits deeper analysis. Precision has been the dominant theme throughout the conflict. The game-changing role of the High Mobility Artillery Rockets (HIMARs), (critically during the Ukrainian counteroffensives in isolating forward deployed combat systems by targeting Russian reserve troop dispositions, headquarters, ammunition dumps, bridging systems and train-based logistics in depth) or even the precise targeting of critical Ukrainian infrastructure by the Russians has demonstrated the critical role of precision in modern combat. It does seem that increasingly precision fire systems will be the future. In India, our ordnance factories are these ammunition behemoths with little capacity/imagination to manufacture smart and precise munitions of the future—they need to transform comprehensively in thought, form, structure and delivery. In a somewhat similar manner, the critical role of long-range fires is also instructive. One of the key differentiators in the comparative targeting strategies of Russia and Ukraine is long-range precision. The momentum of Ukrainian frontline operations has often been stymied due to the Ukrainian inability to secure its depth areas through air and missile defences as also by way of response to Russian long-range strikes in kind (of Russian cities and infrastructure). The ability of High-Speed Anti-Radiation Missiles (HARM), integrated with aerial Ukrainian MiG-29 platforms to disable Russian radars has been most valuable; the role of the Javelin in neutralising Russian tanks with precision has also been seminal. The Indian military does need to think through the entire challenge of precision weaponry and upgrade its capacities in this regard. In the light of Chinese long-range strike capacities encapsulated by their Rocket Force, we will also need to re-visit the mechanics of our operational

posture/deployment along our Northern Borders—the need to fight distributed and dispersed to thwart the might of the PLA's Rocket Force is a challenge that we need to address. Do we have such a plan? What options does the Indian military have to offer to its political masters in terms of long-range retaliatory strikes? Critical posers that merit some quick thinking—a sophisticated ecosystem of precision and long-range strike, is the need of the hour.

Warfighting Advantage: Electro-Magnetic Spectrum. The battle in Ukraine has been between precisionary and EW—the latter emerging as the only degrader of the former. Additionally, the foundation of IW lies in the ability of modern militaries to dominate the EM Spectrum. In India's Thearerisation paradigm, perhaps the first stop should be a Theatre Command that encapsulates all modern capacities in warfighting “Space, EW, Cyber and Long Range Precision.”

New Talent Pipelines. We have reached a stage in warfare whence private sector competencies/new talent pipelines are indispensable not only in capacity building, but also in warfighting. From skilled professionals that enabled intelligence fusion to Microsoft Cyber Threat Identification Teams to Musk's whizkids working Starlink terminals, the private sector contribution has been profound. The baby steps that we in the Indian defence ecosystem have taken in this regard, need to be expanded by a significant order of magnitude.

Nuclear Transitions. The conflict also tells us that nuclear capacities as the ultimate backstop and guarantor of national security, do matter. The fact that Russia boasts of the world's largest nuclear arsenal (5,977 warheads¹⁰) has been a significant factor in influencing US and NATO planning and decision-making. We in India need to think through the modern nuclear paradigm, carry out some careful risk balancing while re-examining some of our simplistic, dated, conclusions afresh, viz, that theatre/tactical nuclear weapons, do not matter, etc. The Chinese nuclear posture is growing in size, precision and sophistication—it has

The Chinese Nuclear System is predicated on ambiguity while the Indian system is based on transparency.

two distinct orientations in the form of a strategic nuclear force and a theatre (tactical) nuclear force—is targeting India, both, in terms of counter value and counter force dispositions, is precise and focussed. The Chinese FOBS (Fractional Orbital Bombardment System) has introduced the

possibility of an additional hypersonic, nuclear vector through space. The Chinese Nuclear System is predicated on ambiguity while the Indian system is based on transparency; there are numerous indicators to suggest that the doctrine of nuclear ambiguity has several virtues. It may be wise, therefore, to re-visit the conceptual metrics of our nuclear posture as also the modernisation of our nuclear triad to arrive at the transitions that we need to make in order that our nuclear deterrence does not seem fragile in moments of grave crises.

An Enabling Narrative. India is the land of the ‘Katha and the Kathakar’: a well-thought-through narrative and a skilful narrator. The aspirational story of becoming a ‘Vikasit Bharat’ by 2047, provides us with both: a narrational edifice as also the outlines of a Grand Strategy. It signals to the wider world—friends, partners, competitors and adversaries alike—that this is an India that is purposeful, one that knows its mind and is determined to attain its place and promise in the world. It also signals to a wide range of Indian stakeholders: the bureaucracy, the military business, the strategic and scientific communities, academia, and our talents abroad, to contribute and work together to turn this dream into reality. We could layer the mega narratives with layered subsets: ones that signal, others that deceive, still others that outreach, etc. The Raisina Dialogue has been developed as an important forum for shaping foreign policy conversations. Should or could MoD and MEA come together and develop a platform that shapes regional and global strategic–military conversations? The latter may be useful to

radiate influence and enable a persuasive acceptance of India's strategic-military interests.

Summation

Securing India's rise is a huge challenge but not one that is unsurmountable. The aforesaid National Security Makeover is a strategic imperative; it is as much about conceptual, attitudinal and doctrinal change as it is a challenge of surgical implementation. The precise contours/metrics of the makeover are of course open to wider debate—this article itself, could provide the intellectual springboard for such a debate. What is certain however is that we will need a major re-imagination in our strategic outlook, a fresh dose of energy and enthusiasm, as also speed and scale in innovation and implementation (the spirit of *anusandhan* and the force of *gatihakti*) for the proposed makeover to become a reality. If the Indian military, wider defence and the National Security Establishment can make this huge leap of faith, there is no reason why India cannot become a twenty-first-century *Vishwaguru*—a global leader, peace-loving and prosperous, but also influential, strong and secure.

- We must not ever forget these words of wisdom, 'If you have the power your values rule, if you don't, you submit'.

Notes

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